

CLAIMS

COMBINATIONS OF GROWTH REGULATING FACTORS AND HORMONES FOR THE TREATMENT OF NEOPLASIA.

5

1- Pharmaceutical combinations for the treatment of neoplasia through simultaneous, separate, or sequential administration, comprising a compound A and B, wherein A and B are selected from the group of molecules consisting in:

A:

10

a.1. GnRH, or its analogues, or anti-GnRH antibodies, or GnRH receptor (GnRH-R), or its mutated variants, or derivative peptides, or anti-GnRH-R antibodies, coupled or not to an immunopotentiating carrier protein.

15

a.2. Natural or recombinant gonadotropins, or their analogues, or their mutated variants, coupled or not to an immunopotentiating carrier protein, hypophyseal anti-gonadotropin antibody, their Fags, scFV fragments, humanized or not.

a.3. Hypophyseal Gonadotropin receptors, or their mutated variants, or derivative peptides, coupled or not to an immunopotentiating carrier protein.

20

a.4. Hypophyseal Gonadotropin anti-receptor antibodies, their Fabs, scFV fragments, humanized or not.

B:

25

b.1. Natural or recombinant EGF or its mutated variants, or derivative peptides, or EGF mimetic peptides, or EGF analogues, coupled or not to an immunopotentiating carrier protein.

b.2. Anti-EGF antibodies, their FabsscFV fragments, humanized or not.

b.3. EGF receptor (EGF-R), or its mutated variants, or derivative peptides coupled or not to an immunopotentiating carrier protein.

b.4. Anti-EGF receptor antibodies, their Fabs, scFV fragments, humanized or not.

30

b.5. Natural or recombinant VEGF or mutated variants, or derivative peptides, or VEGF mimetic peptides, or VEGF analogues, coupled or not to an immunopotentiating carrier protein.

b.6. Anti-VEGF antibodies, their Fabs, scFV fragments, humanized or not.

b.7. VEGF receptors, or mutated variants, or derivative peptides from VEGF receptors, coupled or not to an immunopotentiating carrier protein.

- b.8. Anti-VEGF receptor antibodies, their Fabs, scFV fragments, humanized or not.
 - b.9. Natural or recombinant TGF α mutated variants, or derivative peptides, or TGF mimetic peptides, or TGF analogues, coupled or not to an immunopotentiating carrier protein.
 - b.10. Anti-TGF antibodies, their Fabs, scFV fragments, humanized or not.
 - b.11 TGF receptor (TGF-R), or mutated variants, or derivative peptides coupled or not to an immunopotentiating carrier protein.
- 2- Combinations according to claim 1, wherein the A and B group of molecules are coupled to the immunopotentiating carrier protein by conjugation or the formation of chimeric proteins.
 - 3- Combinations according to claims 1 and 2, wherein the GnRH analogue peptide has sequence pGlu-His-Trp-Ser-Tyr-Pro-Leu-Arg-Pro-Gly, coupled to an immunopotentiating carrier protein.
 - 4- Combinations according to claims 1 and 2, wherein the immunopotentiating carrier protein is selected from *Neisseria meningitides* P1 and P64 outer membrane proteins.
 - 5- Combinations according to claims 1 and 2, wherein the immunopotentiating carrier protein is a Tetanic Toxoid (TT) T helper epitope.
 - 6- Combinations according to claims 1 and 2, wherein the conjugated chimeric protein is one of the following variants:
 - a) GnRH bound to a carrier protein and to EGF.
 - b) GnRH bound to a carrier protein and to VEGF.
 - c) GnRH bound to a carrier protein and to TGF.
 - d) GnRH bound to a carrier protein, to EGF and TGF.
 - e) GnRH bound to a carrier protein, to VEGF and EGF.
 - 7- A method for the generation of combined immune response comprising treatment with one of the therapeutic combinations defined in any claims from 1 to 6.
 - 8- A method according to claim 7, wherein the combinations can be applied simultaneously, separately, or sequentially.